Remarks

Claims 1-19 are pending.

Claim 1 stands rejected under 35 U.S.C. § 103 as being unpatentable over Scarborough et al., U.S. Patent No. 5,338,345, in view of ICSC 1380 on naphtha.

Claims 1-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Scarborough and ICSC 1380 and further in view of Nielson, U.S. Patent No. 5,100,697.

Claim 1 has been amended to clarify that the aqueous emulsions include a discontinuous phase having a paraffin wax and at least one of the recited oils. Claim 5 has been amended to delete the recitation regarding "preferable" values for n. Claims 1-16 have been amended to clarify the claims and place the claims in proper format. The term "compositions" in the preambles has been amended to recite the singular "composition". No new matter is added.

As recited in the claims as amended, the present invention is directed generally to compositions intended to be applied to surfaces of freshly poured mortar or concrete mixes before the start of setting in order to prevent the evaporation of water needed for the mortar or concrete to set and harden. The compositions are provided in the form of aqueous emulsions. Water is the continuous phase of the emulsion. As described, for example, at paragraphs [0062] and [0092] to [0099], the discontinuous phase comprises (a) at least one petroleum-derived or synthetic paraffin wax containing saturated aliphatic hydrocarbons, unsaturated aliphatic hydrocarbons or mixtures therof, wherein the aliphatic hydrocarbons are of general formulae C_nH_{2n+2} and C_nH_{2n} for which n is at least equal to 30 and the melting point of which is between 40°C and 75°C, combined with either (b) at least one linear or cyclic hydrocarbon oil, of aliphatic or naphthenic origin, of general formulae C_nH_{2n+2} and C_nH_{2n} for which n is less than 30, which is a liquid at room temperature or (c) at least one oil formed from at least one ester

resulting from the condensation reaction between a saturated and/or unsaturated fatty acid and a monohydric, dihydric or trihydric alcohol or (d) a combination of (b) and (c).

For at least the reasons set forth below, the claims as amended are patentable over the references cited by the Examiner.

Rejection of Claims Under 35 U.S.C. § 103

Claim 1 stands rejected under 35 U.S.C. § 103 as being unpatentable over Scarborough et al., U.S. Patent No. 5,338,345, in view of ICSC 1380 on naphtha.

Claims 1-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Scarborough and ICSC 1380 and further in view of Nielson, U.S. Patent No. 5,100,697.

The applicant respectfully maintains that the Examiner has failed to establish a *prima facie* case of obviousness in this case. As set forth in detail below, the cited references do not teach or suggest emulsions having a discontinuous phase comprising the separate components as recited in the claims as amended. One skilled in the art would not have predicted the results achieved by the applicant based on the information available in the references cited by the Examiner. Accordingly, the combination suggested by the Examiner does not establish that the claimed composition is obvious. See "Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in View of Supreme Court Decision in KSR International v. Teleflex, Inc.", 72 Fed. Reg. 57,526 (October 10, 2007)(in order to establish obviousness, must show a combination of prior elements according to known methods to yield predictable results).

In the KSR case, the Supreme Court confirmed the application of the factors set forth in Graham v. John Deere Co., 383 U.S. 1 (1966), in determining whether a claimed invention is obvious. Under Graham, one must consider the scope and content of the prior art and the differences between the prior art and the claims at issue to determine if an invention is obvious.

Scope and Content of the Prior Art

The primary reference cited by the Examiner is Scarborough. Scarborough describes a water repellant coating composition comprising an emulsion having water as the continuous phase and "droplets of a nonvolatile organic water repellant composition" as the discontinuous phase. Col. 2, lines 28-30. As described by Scarborough, the composition is intended to provide a water repellant coating on substrates such as wood, brick or concrete. Col. 1, lines 22-25. In order to stabilize the emulsion, Scarborough describes use of a hydrophobically modified polyacrylic acid polymer.

The nonvolatile organic water repellant composition of Scarborough may comprise a paraffin wax, as well as other components such as hydrocarbon resin, preservatives, surface tension modifiers and pigments. Col. 5, line 37 to col. 6, line 66. Scarborough states that the composition "***may*** require a small amount of volatile organic solvent so that the emulsion can be formed." Col. 6, lines 37-39. Naptha and mineral spirits are described as the most preferred solvents. Col. 6, lines 44-45.

In the emulsion described in Scarborough, the nonvolatile organic water repellant composition is formed, and in a separate vessel "water and the hydrophobically modified polyacrylic acid polymer are stirred together until the emulsifier is dissolved in the water." Col. 7, lines 22-35. In forming the nonvolatile organic water repellant composition, Scarborough states "[t]he ingredients for this oil phase are dissolved into an organic solvent if necessary such as petroleum distillate solvent." The nonvolatile organic water repellant composition is then added to the water and hydrophobically modified polyacrylic acid polymer to form an emulsion. Col. 7, lines 40-44. Accordingly, the composition of Scarborough comprises water as the

continuous phase and the nonvolatile organic water repellant composition as the discontinuous phase.

Nielsen describes a composition and method for improving the release of a molded concrete body from a mold. The composition of Nielsen is an oil-in-water emulsion. The oil may include an ester of an aliphatic carboxylic acid with a mono or dihydric alcohol. Col. 3, line 62 to col. 4, line 7. Nielsen does not describe the use of a paraffin wax in the emulsions. In addition, Nielsen does not describe or suggest an emulsion in which the discontinuous phase is a paraffin wax and at least one oil.

The remaining reference cited by the Examiner, ICSC 1380, is an International Occupational Safety and Health Information Centre data sheet for naphtha. The data sheet does not describe any emulsions, and merely provides physical data for naphtha.

Differences Between the Prior Art and the Claims at Issue

In this case, the Examiner has failed to establish a *prima facie* case of obviousness. The references cited by the Examiner do not describe, teach or suggest an emulsion with a discontinuous phase comprised of a paraffin wax and at least one oil as recited in claim 1. Moreover, the references cited by the Examiner do not describe, teach or suggest an emulsion formed by the method recited in claim 15. Moreover, there is nothing in the references cited that describes or suggests forming an emulsion with a discontinuous phase comprising a paraffin wax and an oil.

Claim 1 as amended recites that the discontinuous phase of the aqueous emulsion of the invention comprises (1) at least one paraffin wax and (2) at least one aliphatic or naphthenic hydrocarbon oil, or at least one ester resulting from the condensation reaction between a saturated and/or unsaturated fatty acid and a monohydric, dihydric or trihydric alcohol, or both.

As described in the application, this emulsion is formed by first producing an oil-in-water emulsion of the oil component and then adding the paraffin wax component.

The composition recited in claim 1 is thus very different from the emulsion of Scarborough. Scarborough describes forming a nonvolatile organic water repellant formulation containing several ingredients. The formed nonvolatile organic water repellant formulation is used in its combined form as the discontinuous phase in the emulsion. In the composition recited in claim 1, the discontinuous phase comprise both an oil and the paraffin wax, and these components are not combined prior to forming the emulsion as described in Scarborough. Accordingly. Scarborough does not describe, teach or suggest an aqueous emulsion of the type recited in claim 1. There is nothing in Scarborough that describes or suggests forming an emulsion using individual ingredients from the nonvolatile organic water repellant formulation, and there is nothing that would motivate one skilled in the art to ignore the teachings of Scarborough and form an emulsion in any manner other than that described, i.e. forming the nonvolatile organic water repellant formulation and using that formulation as the discontinuous phase of the emulsion.

Nielson does not address the deficiencies of Scarborough. Nielson describes an oil-in-water emulsion composition for use in concrete molding that may comprise an ester of a carboxylic acid and a monohydric or dihydric alcohol. Nielson does not describe use of a paraffin wax at all. Moreover, one skilled in the art would not be motivated to include an ester of the type described in Nielson in the nonvolatile organic water repellant formulation, and even if it were included, Scarborough teaches that the oil should be incorporated in the nonvolatile organic water repellant formulation prior to emulsifying the nonvolatile organic water repellant

formulation. Nielson doe not describe, teach or suggest an emulsion having the discontinuous phase recited in claims 1.

The final reference cited by the Examiner, ICSC 1380, merely provides physical data for naphtha, and does not describe any type of emulsion, much less an emulsion of the type recited in claim 1 as amended.

Accordingly, for at least the reasons set forth above, the references cited by the Examiner fail to establish a *prima facie* case of obviousness under 35 U.S.C. § 103 for claims 1-19 as amended.

In view of the amendments to the claims and the foregoing remarks, the pending claims are believed to be allowable over the prior art of record. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorney would be advantageous to the disposition of this case, and in particular if a terminal disclaimer is required for allowance, the Examiner is cordially requested to telephone the undersigned. If the Examiner has any questions in connection with this paper, or otherwise if it would facilitate the examination of this application, please call the undersigned at the telephone number below.

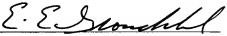
Because the reasons above are sufficient to traverse the rejection, Applicants have not explored, nor do they now present, other possible reasons for traversing such rejections. Nonetheless, Applicants expressly reserve the right to do so, if appropriate, in response to any future Office Action.

A Petition for a One Month Extension of Time along with the associated fees are filed herewith. No additional fee is believed to be required. In the event the Commissioner of Patents

and Trademarks deems additional fees to be due in connection with this application, Applicant's attorney hereby authorizes that such fee be charged to Deposit Account No. 50-3569.

Dated: June 22, 2009

Respectfully submitted,



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